MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

Overhead Door Corporation.
23 Industrial Park Road
Lewiston, PA 17044

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: 22' Rolling Steel Door

APPROVAL DOCUMENT: Drawing No. D-308133, titled "Series 610/620 Rolling Service Door 22 FT. Dade County", sheets 1 through 3 of 3, prepared by Overhead Door Corporation, signed sealed by L. G. Krupke, P.E., dated 09/05/03, with last revision on 05/17/04, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.
This NOA consists of this page 1, evidence page as well as approval document mentioned above.
The submitted documentation was reviewed by **Candido F. Font, PE.**

09/16/04

PRODUCT CONTROL ACCEPTED

NOA No 03-1015.02
Expiration Date: September 16, 2009
Approval Date: September 16, 2004

Overhead Door Corporation.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. D-308133, prepared by Overhead Door Corporation, titled Series 610/620 Rolling Service Door 22 FT. Dade County, dated 09/05/03, with last revision on 05/17/04, sheets 1 through 3 of 3, signed and sealed by L. G. Krupke, PE.

B. TESTS

1. Test report on Uniform Static Air Pressure per TAS 202, Large Missile Impact Test per TAS 201, Cyclic Wind Pressure Test per TAS 203 and Tensile Test per ASTM E8 on a "22' x 10" Steel Roll-Up Service Door", prepared by Architectural Testing, Inc., report No. ATI 01-43463.03, dated 09/10/03 revised on 07/15/04, signed and sealed by L. G. Krupke, PE.

C. CALCULATIONS

1. Calculations for Dade County Product Approval of 20 & 18 Gage Rolling Garage Door, prepared by Overhead Door Corporation on sheet 2 of 3, signed and sealed by L. G. Krupke, PE.

D. QUALITY ASSURANCE

1. Building code Compliance Office.

E. STATEMENTS

1. Code compliance and No interest letter prepared by Overhead Door Corporation on 10/03/03 signed and sealed by L. G. Krupke, PE and notarized by M. G. Bettes.

F. MATERIAL CERTIFICATIONS

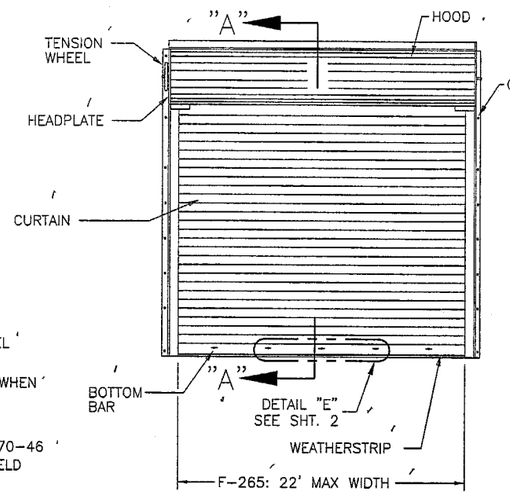
N/A

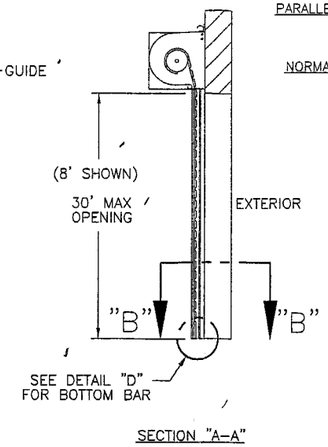
09/16/09

Candido F. Font, PE
Senior Product Control Examiner
NOA No 03-1015.02
Expiration Date: September 16, 2009
Approval Date: September 16, 2004

NOTES

1. (−W/L) = NEGATIVE WINDLOAD
   (+W/L) = POSITIVE WINDLOAD
2. WALL ANGLES MAY BE WELDED TO STEEL JAMB. SEE SHEET 2 FOR WELDING DETAILS.
3. RATED DESIGN LOAD ±65 PSF.
4. CURTAIN MATERIAL: ASTM A−446 GRADE C
   GUIDE MATERIAL: ASTM A−36
5. ALTERNATE CURTAIN MATERIAL: AISI−304 SS. MINIMUM YIELD 40,000 PSI.
6. CURTAIN MATERIAL SHALL BE GALVANIZED ACCORDING TO ASTM A−525 TO G90 OR AN EQUIVALENT SURFACE COATING APPROVED AND TESTED AS REQUIRED BY THE OVERHEAD DOOR CHECK−LIST BY THE DADE COUNTY BUILDING CODE COMPLIANCE OFFICE.
7. THE DOOR MUST BE INSTALLED WITH THE TENSION WHEEL FACING THE INSIDE OF THE BUILDING.
8. PINS MUST BE ENGAGED AND CHAIN MUST BE HOOKED WHEN HURRICANE WINDS ARE ANNOUNCED.
9. WIND LOCKS ARE REQUIRED ON EACH SLAT
9. WINDLOCK MATERIAL: LOW CARBON CAST STEEL, GRADE 70−46 (485−250) PER ASTM A27. MIN TENSILE 70−KSI MIN YIELD 36−KSI. MIN ELONG 22%
10. WINDLOCKS ATTACHED TO EACH SLAT (CONTINUOUS)





SECTION "A−A"

PARALLEL FORCE: THE CATENARY FORCE OF THE CURTAIN APPLIED TO THE WINDBAR IN POUNDS PER FOOT OF HEIGHT.

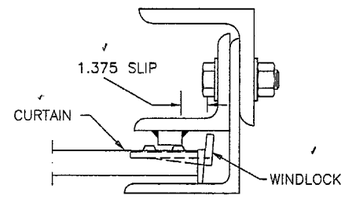
NORMAL FORCE: THE FORCE NORMAL TO THE DOOR OPENING IN POUNDS PER FOOT OF HEIGHT.

MOMENT: THE RESOLUTION OF THE PARALLEL & NORMAL FORCES TO A POINT CORRESPONDING TO THE HEEL OF THE WALL ANGLE IN INCH/POUNDS PER FOOT OF DOOR HEIGHT.

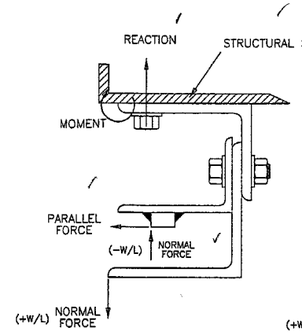
SHEET REVISION RECORD		
3	2	1
A	C	C

REVISIONS

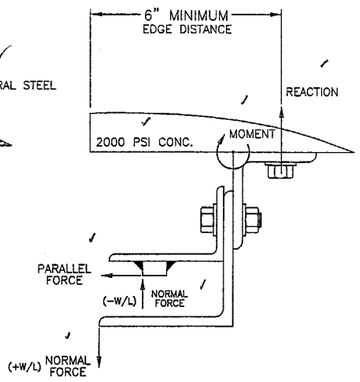
LETTER	DESCRIPTION	DATE	APPROVAL
A	REV PER EN 20619	9/18/03	JDF
B	REV PER EN 20625	10/10/03	LK
C	REV PER EN 20685	5/12/04	LK



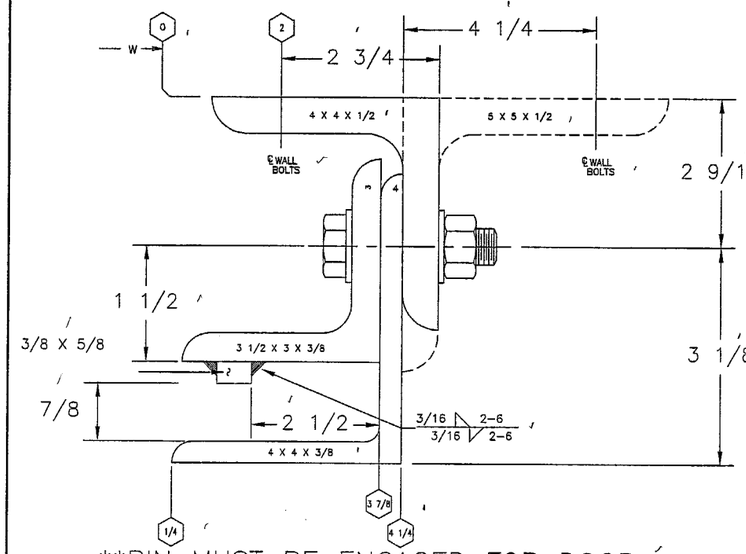
WINDLOCK/WINDBAR RELATIONSHIP DETAIL

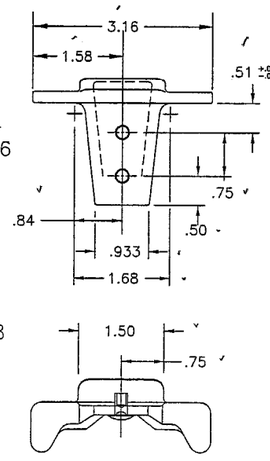


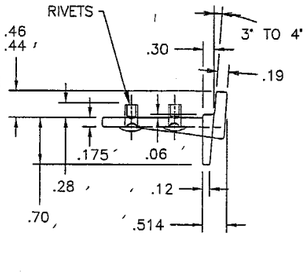
E MOUNT



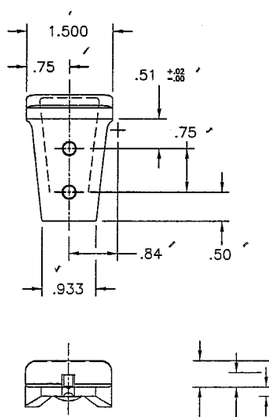
Z MOUNT

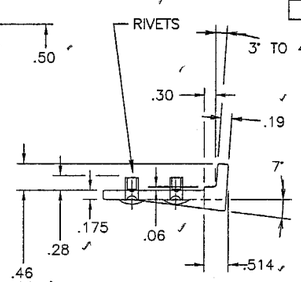






CONTINUOUS WINDLOCK DETAIL





F−265 − DOOR SIZE REF. SUMMARY

LBS/FT DOOR	(E−MOUNT) LOADS *		(Z−MOUNT) LOADS *	
HEIGHT	20 GA **	18 GA	20 GA **	18 GA
REACTION	9621	9454	3419	3369
NORMAL	715	715	715	715
PARALLEL	2710	2663	2710	2663

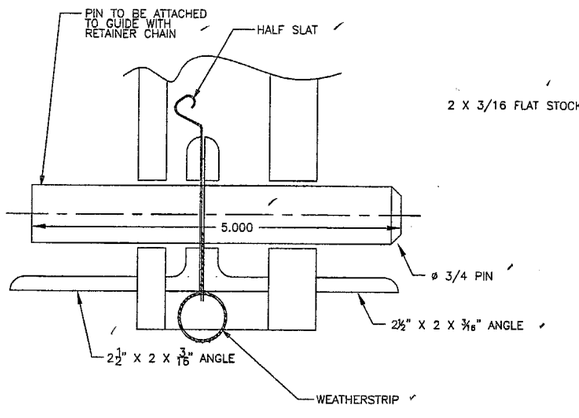
* LOADS − PER FOOT OF HEIGHT

	ASSEMBLY BOLT	WALL BOLT STEEL JAMB	WALL ATTACHMENT CONCRETE JAMB
F−265	5/8" GRADE 5, 10" O.C.	5/8" GRADE 5, 12" O.C.	5/8", 6" EMB RAWL BOLTS −OR− 5/8", 5" EMB WEDGE BOLTS 8" O.C.

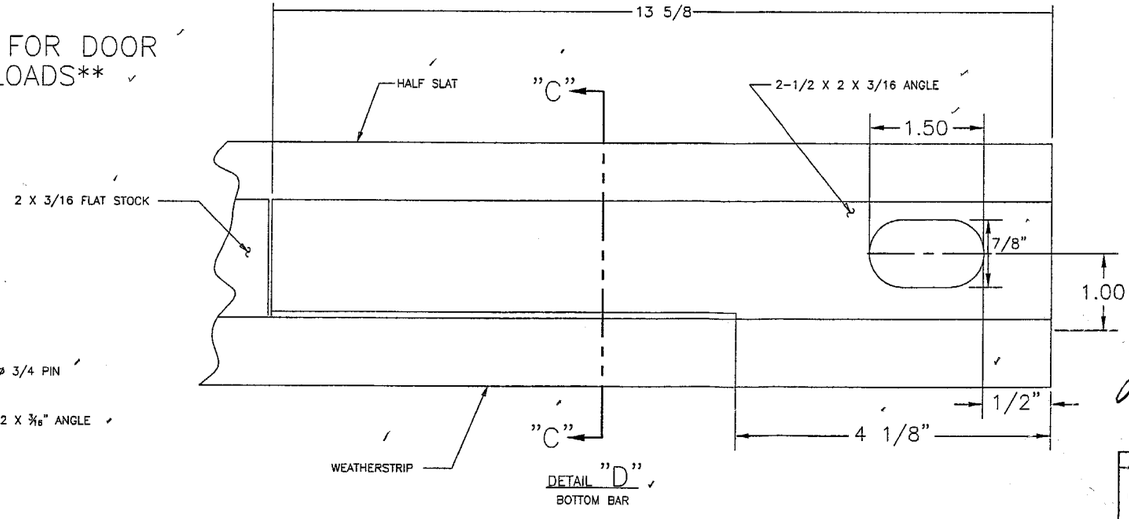
* 2000 PSI MINIMUM & 6" MINIMUM EDGE DISTANCE FOR ANCHOR

2 NOTE: FOR DETAILS ON WELDING GUIDES TO STEEL JAMBS SEE SHEET 2.

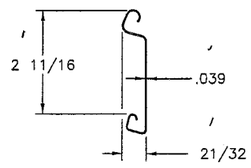
PIN MUST BE ENGAGED FOR DOOR TO WITHSTAND DESIGN LOADS



SECTION "C−C"



DETAIL "D" BOTTOM BAR



F−265 SLAT

GAUGE OPTIONS: 20 **, 18

** TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS PA 201−94, PA 202−94, AND PA 203−94

Approved as complying with the Florida Building Code
Date 09/16/04
NOA# 03-1015.02
Miami Dade Product Control Division
By

L G Kpke
8-17-04

OVERHEAD DOOR CORPORATION
1900 CROWN DRIVE
FARMERS BRANCH, TEXAS 75234
LeROY G. KRUPKE, P.E. #36580

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES/TOLERANCES ON
DECIMAL DIMENSIONS: .XX= ± .03, .XXX= ± .008
HOLE DIAMETERS: UNDER .251+.004−.003; .251 TO .501+.005−.003; OVER .501+.008−.003
ANGLES ± 0° 30'
FRACTIONS ± 1/16"

OVERHEAD DOOR the original since 1921 DALLAS, TEXAS
MATERIAL:
APPLIED FINISH:
UNIT OF MEASURE: N/A

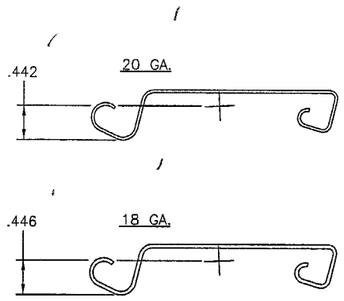
	NAME	DATE
DRAWN BY:	G FINERAN	8/8/03
CHECKED BY:	JD FAW	9/5/03
APPROVED BY:	L KRUPKE	9/5/03

DRAWING TITLE: SERIES 610/620, ROLLING SERVICE DOOR 22 FT. DADE COUNTY
DRAWING NUMBER D- 308133
SCALE: NONE
SHEET 1 OF 3

NOTES

REVISIONS			
LETTER	DESCRIPTION	DATE	APPROVAL
A	REV PER EN 20619	9/18/03	JDF
B	REV PER EN 20625	10/10/03	LK
C	REV PER EN 20685	8/17/04	LK

CALCULATIONS:



CURTAIN SLAT PITCH = 2.67 IN. OR 4.494 SLATS PER FOOT, PROPERTIES ON A PER FOOT BASIS:

	I(IN⁴)	A(IN²)	C(IN)
20 GA.	0.0377	0.8422	0.444
18 GA.	0.0494	1.0965	0.450

CALCULATIONS SHOWN FOR 20 GA. SLAT.

WINDLOCK SLIP DISTANCE= 1.375"/SIDE

W= DOOR WIDTH

$W = 22$ FT.

D = CURTAIN DEFLECTION

$D = [0.75\ (12)\ W\ (\text{WINDLOCK SLIP})]^{1/2}$

$D = [0.75\ (12)\ (22)\ 1.375]^{1/2}$

$D = 16.5$ IN.

S_Y = YIELD STRESS OF SLAT MATERIAL

$S_Y = 40{,}000$ PSI

E = MODULUS OF ELASTICITY

$E = 29{,}000{,}000$ PSI

Q_B = WINDLOAD HELD IN BENDING

$$Q_B = \frac{2EID}{45W^4} \text{ OR } \frac{2S_YI}{3W^2C} \text{ (LESSER VALUE)}$$

$$Q_B = \frac{2(29{,}000{,}000)(0.0377)(16.5)}{45(22)^4}$$

$Q_B = 3.42$

$$Q_B = \frac{2(40{,}000)(0.0377)}{3(22^2)(0.444)}$$

$Q_B = 4.68$

$Q = 65$ PSF

Q_T = WINDLOAD HELD IN TENSION

$Q_T = Q - Q_B$

$Q_T = 65 - 3.42$

$Q_T = 61.78$ PSF

$$T_E = \frac{3Q_T W^2}{2D}$$

$T_E = 2710$ LB/FT.

T_F = THRUST LOAD ON GUIDES PER FOOT OF HEIGHT.

$$T_F = \frac{Q \cdot W}{2}$$

$T_F = 715$ LB/FT.

T_S = TENSION/SLAT

$T_S = 2710/4.494$

$T_S = 603$ LB/SLAT

M_R = MAXIMUM RESULTANT MOMENT APPLIED TO JAMB (Z-MOUNT)

$M_R = 2710(4.44)+715(3.50)$

$M_R = 14535$ IN·LB

M_R = MAXIMUM RESULTANT MOMENT APPLIED TO JAMB (E-MOUNT)

$M_R = 2710(4.44)$

$M_R = 12032$ IN·LB

WINDLOCK FASTENERS

DESCRIPTION: SEMI-TUBULAR OVAL HEAD RIVET

MATERIAL: LOW CARBON STEEL, ZINC OR CADMIUM PLATED

SIZE: 1/4" X 7/16" LONG (.244" MIN. DIA.)

A_R = CROSS SECTIONAL AREA/RIVET

$$A_R = \frac{\pi \cdot D^2}{4}$$

$A_R = 0.047$ IN²

S_S = SHEAR STRESS ACROSS TWO END FASTENERS

$S_S = T_S/(2 \cdot A_R)$

$S_S = 603/(2 \cdot 0.047)$

$S_S = 6414$ PSI

WINDBAR WELDS

A_W = AREA OF WELD

A_W = LENGTH · FILLET WIDTH

$A_W = (2)(0.1875)$

$A_W = 0.375$ IN²

S_W = SHEAR STRESS ACROSS WELD

$S_W = (3\text{ IN})(1\text{ FT}/12\text{ IN})(2710\text{ LB/FT})/(0.375\text{ IN}^2)$

$S_W = 1807$ PSI

WALL ATTACHMENT BOLTS (MAXIMUM LOAD)

STEEL JAMB–POSITIVE WINDLOAD (E-MOUNT)

R_B = WALL ATTACHMENT BOLT REACTION

$R_B = 12032/1.25$

$R_B = 9625$ LB.

CONCRETE JAMB–POSITIVE WINDLOAD (Z-MOUNT)

$R_B = [(7/12)(14535)]/4.25$

$R_B = 1995$ LB.

WALL ATTACHMENT WELD

A_W = AREA OF WELD

$A_W = 2 \times 2 \times .375 \times .707$

$A_W = 1.06$ IN²

S_W = SHEAR STRESS ACROSS WELD

$S_W = 12/12\ (2710)/1.06$

$S_W = 2556$ PSI

T_W = TENSION STRESS FROM BENDING AND NORMAL LOADS

$T_W = T_F/A_W + M_R/[\text{WELD LENGTH} \times \text{WELD WIDTH ON ANGLE} \times \text{WELD SIZE} \times .707]$

$T_W = 12/12\ [715/1.06 + 14535/\ [2 \times 2.75 \times .375 \times .707]]$

$T_W = 10642$ PSI

R_W = RESULTANT WELD STRESS

$R_W = [S_W^2 + T_W^2]^{1/2}$

$R_W = 10944$ PSI

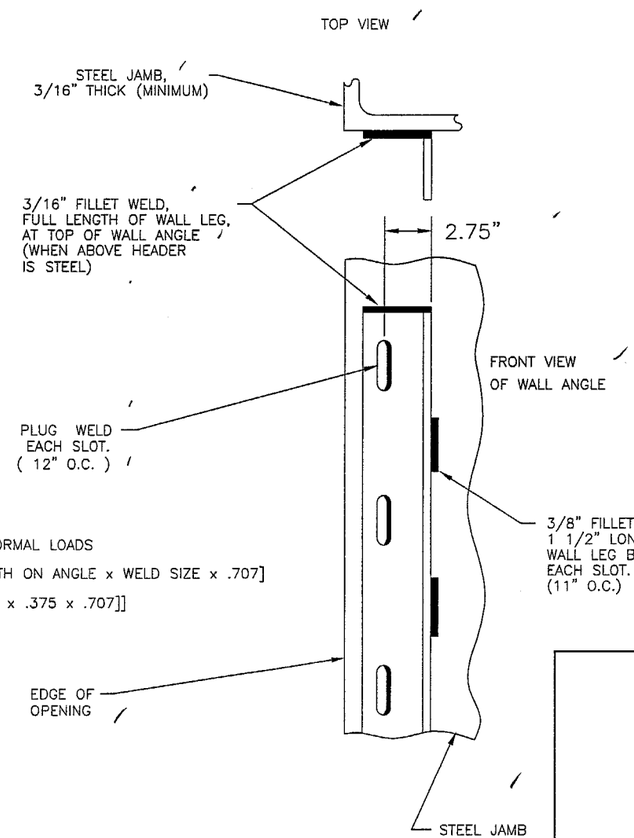
"S" = W + 7 3/4"

SLAT LG = W + 5 1/4"

PIPE LG = W + 3 1/4"

BOTTOM BAR LG = W + 5 1/4" (COPES = 4")

DETAILS FOR WELDING "E" GUIDES TO STEEL JAMBS



Approved as complying with the Florida Building Code
Date 09/16/09
NOA# 03-1015.02
Miami-Dade Product Control
Division
By

L G Krupke
8-17-04

OVERHEAD DOOR CORPORATION
1900 CROWN DRIVE
FARMERS BRANCH, TEXAS 75234

LeROY G. KRUPKE, P.E. #36580

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES TOLERANCES ON
DECIMAL DIMENSIONS: .XX= ± .03, .XXX= ± .005
HOLE DIAMETERS: UNDER .251= .004-.002; 251 TO .500=.006-.003; OVER .500=.008-.003
ANGLES ± 0° 30'
FRACTIONS ± 1/16"

OVERHEAD DOOR the original since 1921 DALLAS, TEXAS

MATERIAL: 4
APPLIED FINISH: 5
UNIT OF MEASURE: N/A

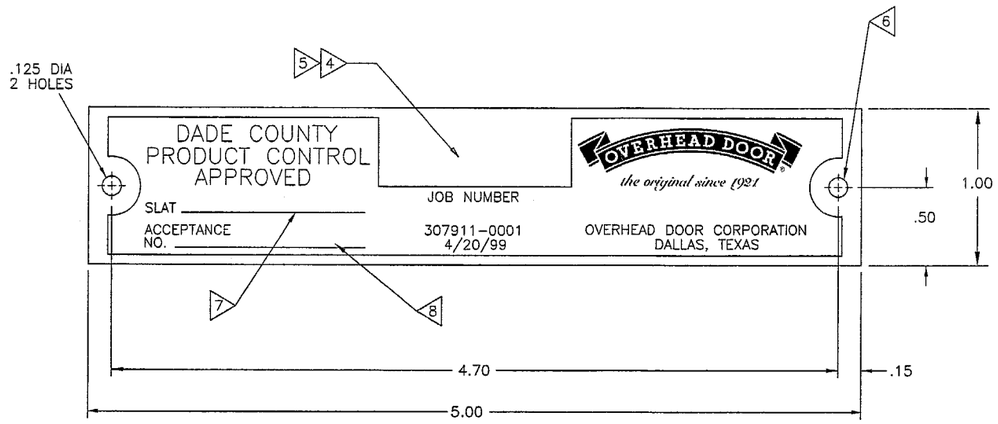
	NAME	DATE
DRAWN BY:	G FINERAN	8/8/03
CHECKED BY:	JD FAW	9/5/03
APPROVED BY:	L KRUPKE	9/5/03

DRAWING TITLE: SERIES 610/620, ROLLING SERVICE DOOR 22 FT. DADE COUNTY
DRAWING NUMBER: D-308133
SCALE: NONE
SHEET 2 OF 3

NOTES

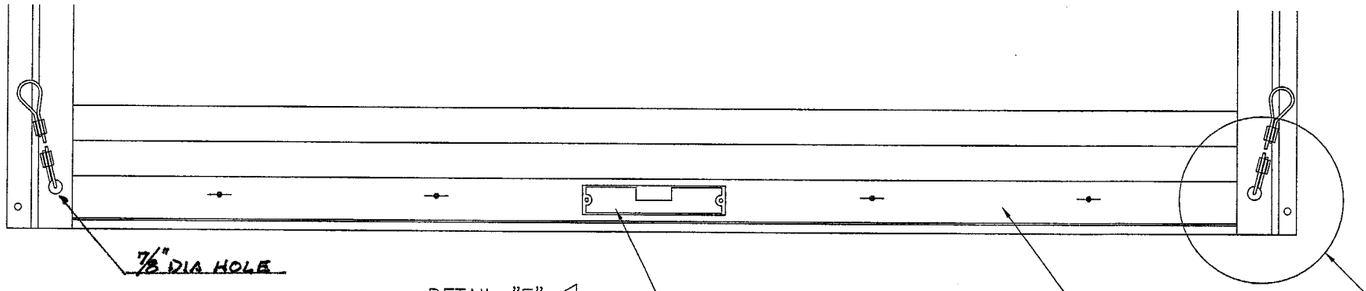
1. MATERIAL: ALUMINUM 3003 H14 (0.03 THICK) WITH TRANSPARENT KELSTRIP COVERING.
2. COLOR: HANSCHY RED CS 2311.
3. SOURCE: OHD ADVERTISING AND MERCHANDISING
   1900 CROWN DRIVE
   FARMERS BRANCH, TX 75234
4. STAMP FACTORY ORDER NUMBER HERE.
5. A LETTER MUST BE STAMPED ON ROLLING FIRE DOORS TO IDENTIFY MANUFACTURING PLANT (I.E., USE "P" FOR PENNSYLVANIA).
6. FASTENER FOR TAG IS P/N 080276-1004(STEEL DRIVE SCREW). TAG WILL BE MOUNTED IN THE MIDDLE OF THE BOTTOM BAR.
7. STAMP SLAT TYPE HERE.
8. STAMP ACCEPTANCE NUMBER HERE.

REVISIONS			
LETTER	DESCRIPTION	DATE	APPROVAL
–	REV PER EN 20625	10/10/03	LK
A	REV PER EN 20685	5/17/04	LK



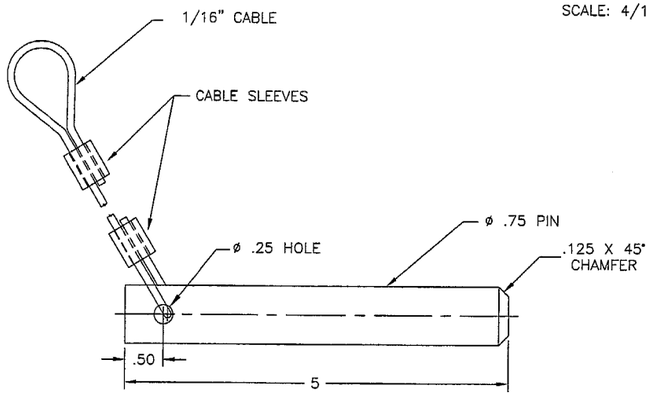
P/N 307911-0001 – DADE CO. APPROVAL TAG, ROLLING DOORS & GRILLES

SCALE: 2/1



DETAIL "E" <6

SCALE: 4/1



DETAIL "F"

8-17-04

OVERHEAD DOOR CORPORATION
1900 CROWN DRIVE
FARMERS BRANCH, TEXAS 75234

LeROY G. KRUPKE, P.E. #36580

Approved as complying with the Florida Building Code
Date 09/16/04
NOA# 03-1015.02
Miami Dade County Product Control
Division
By

UNLESS OTHERWISE SPECIFIED				NAME	DATE
DIMENSIONS ARE IN INCHES/TOLERANCES ON			OVERHEAD DOOR the original since 1921 DALLAS, TEXAS	DRAWN BY: M WOMACK	10/10/03
DECIMAL DIMENSIONS	HOLE DIAMETERS	ANGLES ± 0° 30'	MATERIAL: N/A	CHECKED BY: JD FAW	10/10/03
.XX= ± .03	UNDER .251+.004-.003	FRACTIONS ± 1/16"			
.XXX= ± .005	.251 TO .500+.006-.003 OVER .500+.008-.003		APPLIED FINISH: N/A / UNIT OF MEASURE: N/A	APPROVED BY: L KRUPKE	10/10/03

DRAWING TITLE: SERIES 610/620, ROLLING SERVICE DOOR 22 FT. DADE COUNTY

DRAWING NUMBER D- 308133

SCALE: NOTED SHEET 3 OF 3